

**RECORD OF DISCUSSIONS  
OF THE SEVENTH MEETING OF THE AIR TRAFFIC  
MANAGEMENT AND FLIGHT OPERATIONS  
COMPONENT OF THE NORTH ASIA  
REGIONAL AVIATION SAFETY TEAM (NARAST)  
BANGKOK, THAILAND  
15 – 16 NOVEMBER 2007**

**Present**

1. The Seventh Meeting of the Air Traffic Management and Flight Operations Component of the North Asia Regional Aviation Safety Team (NARAST) was attended by the nominated representatives from the Civil Aviation Authorities and Airlines of the participating Member States, representative(s) from ICAO, FAA, DGAC France, EASA, Airbus, Boeing, Bombardier, and COSCAP-SA. There were a total of 35 participants. The list of participants is attached as Annexure I.

**Venue**

2. The Meeting was held from 15 - 16 November 2007 at the Asia Pacific ICAO Regional Office, Bangkok Thailand.

**Welcome Address (Opening Remarks)**

3. Captain Fareed Shah from ICAO, Asia and Pacific (APAC) Office, welcomed the participants on behalf of the ICAO. He extended a warm welcome to all the delegates and representatives for coming to Bangkok to participate in the Seventh Meeting of the North Asia Regional Aviation Safety Team (NARAST). He highlighted the success achieved by the NARAST and the importance of the NARAST in improving safety under the ICAO GASP.

**Proceedings of the Meeting**

4. The Meeting progressed in accordance with the Agenda with slight adjustments of the order. A copy of the Agenda (Programme) is placed at Annexure II.

5. The participants at the Meeting introduced themselves.

6. The following presentations were made by various organizations. NARAST expressed its gratitude and thanked all the presenters. A brief summary of the presentations is as follows:

**6.1 ICAO Global Aviation Safety Plan**

CTA COSCAP-NA provided a presentation of ICAO GASP to the meeting, briefly introduced the ICAO GASP and the Global Aviation Safety Roadmap to the participants as well as the relationship of the Roadmap and the GASP. The CTA also highlighted the implementation of GASP in his presentation.

**Recommendations:**

6.1.1 NARAST to identify GASP/Roadmap objectives/best practices that are applicable to NARAST safety enhancement.

6.1.2 COSCAP-NA to examine objectives/best practices of the GASP/Roadmap and identify areas where NARAST can assist member states' implementation of GASP.

## **6.2 EASA and the European Safety Strategic Initiative by Mr. Erick Ferrandez**

Mr. Erick Ferrandez introduced to the meeting the evolution and the Vision, Aim and Mission of the ESSI as well as its three components, which are: ECAST, EHEST and EGAST. ESSI offers a new approach to regional safety and is looking forward to cooperating with Asia-Pacific RAST.

### **Recommendations:**

6.2.1 NARAST to cooperate with ESSI to take new initiatives from Europe to enhance safety in North Asia.

6.2.2 Member States indicated interest in attending the ESSI meetings. The proposal was warmly welcomed by ESSI. It was suggested that at one or more representative(s) from COSCAP-NA member States to attend the ESSI meetings.

6.2.3 COSCAP-NA to request invitation from ESSI.

## **6.3 Update of FAA CAST by Mr. Kyle Olsen**

Mr. Kyle Olsen refreshed the participants with the Vision, Mission, Goals and Structure of CAST. The new development of the CAST was introduced by Mr. Kyle Olsen. States were encouraged to implement the safety enhancements of CAST. The presentation also highlighted that airport safety call to action.

## **6.4 Challenges and Opportunities for COSCAP RAST**

The presentation was provided jointly by Mr. Gerard Guyot from Airbus and Mr. Hank Reed from Boeing. Worldwide commercial jet fleet is growing but there are limits to the growth. The presentation highlighted that safety is a shared responsibility of manufacturers, operators and governments, COSCAP regional safety teams and similar safety organizations can help to reduce accident risk and consideration should be given to implementing appropriate CAST safety enhancements to reduce fatality risk. Airbus and Boeing are committed to help enhance aviation safety. As for next steps, NARAST was suggested to measure implementation levels and effectiveness of processes and procedures already put in place (e.g. adopted CAST Safety Enhancements), to integrate appropriate elements of the Global Aviation Safety Roadmap, to identify gaps that exist and form plans to address, and, to establish an information-sharing process to better gauge effectiveness of enhancements and identify emerging threats.

## **6.5 PBN Implementation and Safety Enhancement Implementation**

CTA COSCAP-NA provided a presentation which focused on the benefits for the implementation of PBN and the ICAO implementation plan for PBN. The implementation roles of ICAO HQs, ICAO Regional Offices, States and stakeholders were highlighted in the

presentation. The presentation also emphasized that the benefits of PBN only come with implementation.

### **6.6 Runway Incursion Prevention and Safety Enhancement Implementation by Mr. Glenn Michael**

Mr. Glenn Michael, Manager, Boston ARTC, FAA made a presentation on runway safety. The presentation provided the background information of the “Call to Actions on Runway Safety” and introduced the short-term actions that could be accomplished in the US which could help to improve runway safety.

### **6.7 Presentation: ECCAIRS by Mr. Jarmo Korhonen**

Mr. Jarmo Korhonen from the AIG Section of ICAO kindly provided the presentation on ECCAIRS by means of the internet. ECCAIRS is available at no cost and is fully compatible with the ICAO ADREP system.

#### **Recommendation:**

6.7.1 Member States were kindly requested to determine whether there is a need to have an ECCAIRS Workshop in the North Asia Region.

6.7.2 ICAO Regional Office was kindly requested to coordinate the provision of the training.

### **6.8 Ground Operation – Wrong Runway Departure by Mr. Glenn Michael**

Capt Glenn W Michael, Manager, Boston ARTC, FAA made a presentation on runway safety. The presentation provided the background information of the “Call to Actions on Runway Safety” and introduced the short-term actions that could be accomplished in the US which could help to improve runway safety. His presentation provided, among other information, a runway safety briefing concerning Runway Confusion Issues. His presentation contained various examples depicting certain peculiar ground layouts geometry of runways and taxiways imposing doubts and confusion for smooth operations of aircraft and vehicle movements. He gave examples whereby aircraft departed from wrong runways, not once, but a number of times – sometimes un-noticed. He explained that wrong runway and runway confusions are major issues that need to be addressed to for greater interest of flight safety. He gave specific example to the accident that took place at Lexington, Kentucky. He quoted many examples of flights that took off from wrong runway and hence emphasized that pilots are required to have a look at the runway heading/compass prior to take off. Last but not the least Capt Glenn reviewed the ICAO Runway Safety Toolkit and provided information on that as well.

### **6.9 Engine Surge – SE 136 by Robert Johnson**

Capt Robert discussed the reasons for the engine surge/stall and how the manufacturers found the need to develop the Engine Surge/Stall checklists. He mentioned about the problems of recognizing the event and some undesired flight crew response to engine surge/stalls. He indicated that most of these events are solved without pilot intervention; however, there are instances where the crew needs to make quick decisions to avert an incident or accident. He mentioned about some instances where the pilot acted too hastily

and shut down the wrong engine or made unwarranted decisions that resulted in aggravating the situation. Last but not the least, he discussed the differences between Strategic and Tactical Decision Making and when to use each.

## **Review of Implementation of COSCAP-NA Steering Committee Conclusions Concerning NARAST**

7. CTA highlighted the need to track and report to the COSCAP-NA Steering Committee Meeting on the implementation of recommendations from NARAST that are subsequently approved by the Steering Committee Meeting. He provided a briefing on the Implementation Status Report of NARAST Recommendations and Steering Committee Conclusions provided to participants.

8. The Implementation Status Report contains information concerning the Recommendations/Conclusions from the first six NARAST Meetings. Work completed by NARAST Team Members to implement conclusions of these five NARAST Meetings as approved by the COSCAP-NA SC Meetings was reviewed and discussed. Based on these discussions and review of some new material the following Recommendations from the 7<sup>th</sup> NARAST Meeting were developed for review by the 8<sup>th</sup> COSCAP-NA Steering Committee Meeting. The numbering reflects those that were used when these items were initially reviewed by NARAST Team Members.

### **CONCLUSIONS / RECOMMENDATIONS FROM 7<sup>th</sup> NARAST MEETING**

#### **FLIGHT OPERATIONS ISSUES**

##### **31. SE-1 CFIT/AP 1.01 - Terrain Avoidance Warning System (TAWS)**

31-STATUS Action COMPLETED.

##### **32. SE - 2 CFIT/AP 1.06 - Standard Operating Procedures (SOP)**

32-STATUS Action Completed.

##### **33. SE-3 CFIT/AP 1.03 – Precision-Like Approach Implementation (“21<sup>st</sup> Century Instrument Approaches”)(Vertical Angles – PAI 1-7, 11)**

33.7B COSCAP-NA to organize seminar/workshop on CDFA on request of member states.

33.7D (i) NARAST focus to be on safety aspects such as elimination of the dive and drive technique in non-precision approaches through implementation of APV approaches (RNP and RNP AR approach), as well as implementation of RNAV departures and arrivals, in accordance with the PBN concept. Support from NARAST to be provided with these safety aspects where APANPRIRG PBN Task Force cannot provide this support.

(ii) ICAO Regional Office kindly requested to provide inputs to the PBN Task Force on the Safety Enhancements related to NARAST efforts to eliminate non-precision approaches and dive and drive approach techniques and the importance of these initiatives from a safety perspective.

(iii) ICAO Regional Office requested to provide a briefing to the NARAST meeting on the developments from the PBN Task Force.

(iv) At this time, member states that have yet to implement the AC COSCAP-NA 008 were kindly requested to put it on hold as a revised version would be issued shortly.

Note: 33.8I ENAC is giving a training course on PBN procedure design in Beijing during the time period of 3<sup>rd</sup> to 14<sup>th</sup> December of 2007.

#### **34. SE-10 CFIT / AP 1.08 - Airline Proactive Safety Programs (FOQA & ASAP)**

34.4 COSCAP-NA to review the Outputs / elements related to SE-10 and provide information to NARAST Members for the next meeting.

34-STATUS At this time, recommended actions have been completed by all participant States. Recognizing that COSCAP-NA will conduct further review and provide additional information, NARAST decided to keep OPEN the Status on SE-10.

#### **35. SE-11 CFIT/AP 1.05 - Implementation Plan for Training - CRM**

35-STATUS Recognizing that all participant States were yet to confirm full implementation of the Steering Committee's decisions, NARAST decided to keep OPEN the status on SE-11 related to Implementation Plan for Training - CRM.

#### **36. SE-12/AP 1.04 CFIT - Training - CFIT Prevention**

36-STATUS Recognizing that all participant States were yet to confirm full implementation of the Steering Committee's decisions, NARAST decided to keep OPEN the status on SE-12 related to CFIT - Training - CFIT Prevention.

#### **37. SE-14/15/16/AP 2.05 ALAR - Policies for ALAR (Safety Culture)**

37-STATUS Recognizing that all participant States were yet to confirm full implementation of the Steering Committee's decisions, NARAST decided to keep OPEN the status on SE-14/15/16/AP 2.05 ALAR - Policies for ALAR (Safety Culture).

#### **2.2 SE-23/AP 2.01 - Approach and Landing Accident Reduction (Flight Crew Training)**

2.2-STATUS Open, awaiting final implementation by all participant States.

#### **2.3 SE-26/AP 3.03 - Loss of Control (SOPs)**

2.3-STATUS Open, but to be actioned under SE-2.

#### **2.4 SE-27/AP 3.01 Loss of Control (Risk Assessments and Management)**

2.4-STATUS Open. On hold.

#### **2.5 SE-28/AP 3.05 Loss of Control (Safety Information)**

2.5-STATUS Action Completed under SE ##### related to Safety Information.

## **2.6 SE-29/AP 3.05 Loss of Control**

2.6-STATUS The requirements under SE-29 were covered under FOQA part of SE-10. No action required for States. COMPLETED.

## **13.1 SE-78 Cabin Injury Reduction During Turbulence**

13.1-STATUS Open.

## **13.2 SE-120 Map Shift Detection/Prevention, GPS Installation and TAWS Safety Enhancement**

13.2.4 COSCAP-NA AC 019 (Draft) was issued on 10<sup>th</sup> Oct. 2007. Member States are requested to provide comments within 60 days. Then the AC will be finalized and issued.

13.2.5 An AB will also be issued to introduce the AC and to address the oversight aspects for CAAs.

## **ATM ISSUES**

### **9-1 CAST SE-9 Controlled Flight Into Terrain - “Minimum Safe Altitude Warning (MSAW)”**

9-1-STATUS Open.

### **9-2 SE-13 ATC Training - CFIT Prevention**

9-2-STATUS Open.

### **9-3 SE-46, 47 Runway Incursions - Air Traffic Control Training**

9-3-STATUS Open.

### **9-4 SE-49, 50, 51, 52 Runway Incursion Standard Operating Procedures - Runway Incursion Prevention**

9.4.3 Ground Operations Safety Seminar with support from FSF is tentatively planned for March, 2008. The seminar will be held in Beijing and Bangkok. They will be open to all States in the Asia and Pacific Region. The exact date for the seminar to be finalized in coordination with AAPA.

9.4.3A (i) Member States are requested to establish a Runway Safety Programme if they have yet to do so.

(ii) To support this effort FAA kindly offered to provide a Runway Incursion Prevention Workshop in the Asia Pacific Region (target date March 2008).

Note: FAA (Glenn Michael) kindly provided the Runway Incursion Safety information for use by COSCAP-NA States.

9.4.3B On hold.

### **9-5 SE-55, 59 Runway Incursion - SOPs for Controllers Situational Awareness**

9-5-STATUS Open.

### **9-6 SE-60 Runway Incursion - Pilot Training**

9-6-STATUS Open.

### **11/6<sup>th</sup>-1 SE-30/AP 3.02 - Loss of Control Training (Human Factors and Automation)**

11/6<sup>th</sup>-1-STATUS Open. On hold.

### **12/6<sup>th</sup>-1 SE-165 Midair - ACAS Policies and Procedures**

12/6<sup>th</sup>-1.1 COSCAP-NA Draft AC 018 was issued on 26 October 2007. Member States were kindly requested to review the draft AC by 16 January 2008 and provide comments to COSCAP-NA.

12/6<sup>th</sup>-1.2 COSCAP-NA to send a notice to Member States with regard to procurement of Safety Bulletins issued by Eurocontrol.

### **12/6<sup>th</sup>-3 SE-121 Cargo - Cargo Loading Training and SOPs**

12/6<sup>th</sup>-3.2 Korean Airlines to provide a presentation at the 8th NARAST Meeting on the best practices adopted by the operator on Cargo Safety (Loading Operations and Training).

### **12/6<sup>th</sup>-4 SE-125 Dangerous Goods Processing**

12/6<sup>th</sup>-4.3 COSCAP-NA to suggest to the ICAO Dangerous Goods Working Group to study the possibility of reducing tariff by air operators so as to ensure that shippers do not intentionally ship undeclared dangerous goods for financial gains.

Note: ICAO was contacted. Hopefully will get the response in the near future.

FAA kindly offered to provide related information to COSCAP-NA.

### **12/6<sup>th</sup>-8 SE-136 Icing - Training - Engine Surge Recovery**

12/6<sup>th</sup>-8.1 On hold. Awaiting FAA (Mr. Kyle Olsen) to provide more information in this respect.

### **12/6<sup>th</sup>-9 SE-163 Midair - See-and-Avoid**

12/6<sup>th</sup>-9.1 Removed, as SE-163 has been removed from CAST programme.

### **12/6<sup>th</sup>-11 SE-162 Midair - Advanced Navigation**

12/6<sup>th</sup>-11.1 Removed, as SE-162 has been removed from CAST programme.

**12/6<sup>th</sup>-16 SE-169 Policy & Procedures – Work Cards / Shift Change / Responsibilities / Manuals; SE-170 Aircraft Design - OEM Continuous Monitoring of Service History; SE-172 Gap Analysis of Existing Airplane Maintenance Process & Follow on Action Plan; SE-175 Policy & Procedures - Flight Critical Configurations Changes Made During Maintenance**

12/6<sup>th</sup>-16.1 The three RASTs to convene a special Maintenance RAST in concurrent with a Maintenance Safety Seminar tentatively in February 2008.

12/6<sup>th</sup>-16.3 FAA kindly offered to provide the agenda of the FAA Maintenance Seminar and offered to assist in providing speakers.

13/6<sup>th</sup>-1 Ramp Safety. The Seminar on Ground Operations was scheduled to be held two times, one in Bangkok and the other one in China, tentative date March 2008.

13/6<sup>th</sup>-2 Fatigue Issues. COSCAP-NA to organize a Fatigue Management Seminar in China, tentatively scheduled for March 2008.

## **Miscellaneous**

### **9. Safety Management System (SMS)**

Recommendations:

9.1 COSCAP-NA to continue to provide support to Member States with regard to implementation of SMS.

9.2 A three day ICAO Workshop on States' Safety Programme and SMS Implementation will be convened at the RO – September 2008. COSCAP-NA Member States were strongly encouraged to attend the Workshop.

9.3 COSCAP-NA, in coordination with COSCAP-SA and COSCAP-SEA to organize an Air Operator SMS Implementation Seminar (Best Practice Exchnage) tentatively scheduled for April 2008.

**10.** Member States were requested to update their implementation of NARAST recommendations and provide to COSCAP-NA before 1 March 2008 in order that an updated report can be provided to the next Steering Committee Meeting scheduled for 1 - 3 April 2008.

**11.** The proposal of establishment of RAST was discussed at the meeting and will be reported to the COSCAP-NA Steering Committee Meeting.

### **12. Date and Venue of the 8<sup>th</sup> NARAST meeting**

12.1 Tentative date during the week of 18 August 2008 or week of 8 September 2008.

12.2 Bangkok suggested as the venue for the NARAST meeting in consideration of the travel required by the external participants.

## **Conclusion / Closing of Meeting**